Amendments to the Claims:

1-104. (Canceled).

105. (currently amended) A method for producing a blend comprising randomly substituted mesogens, said method comprising:

providing a first phenylene ring consisting essentially of a first functional group at a para-position to a first halogenated carboxylic group;

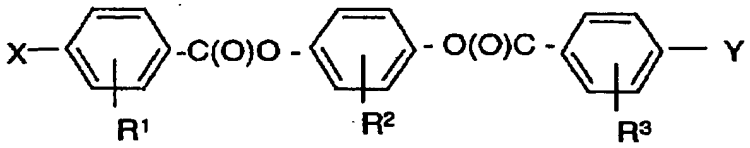
providing a second phenylene ring consisting essentially of a second functional group at a para- position to a second halogenated carboxylic group;

providing a third phenylene ring comprising R^2 and comprising a first functionality at a para- position to a second functionality; and

forming a mixture comprising said first phenylene rings, said second phenylene rings, and said third phenylene rings;

exposing said mixture to first conditions effective to react said first carboxylic group with said first functionality to produce a first ester bond, said first conditions being effective to react said second carboxylic group with said second functionality to produce a second ester bond, producing a reaction product comprising said first functional group at position para- to said first ester bond and said second functional group at a position para- to said second ester bond; and

treating said reaction product under second conditions effective to produce platform molecules ~~providing one or more platform molecules have~~having the following general structure:



wherein:

~~X comprises a terminal functionality and Y comprises a polymerizable group in about 50 wt% or more of said blend, and one or more members selected from the group consisting of X and Y comprises one or more spacer groups~~ X and Y comprise hydroxyl groups; and;

R^2 is a bulky organic group whereby, when both X and Y are reacted with polymerizable groups to produce polymerizable mesogens, R^2 provides sufficient steric hindrance to achieve a nematic state at room temperature while suppressing crystallinity of said polymerizable mesogens at room temperature; and,

R^1 and R^3 are selected from groups less bulky than R^2; and

independently substituting at least one member selected from the group consisting of X and Y with a terminal group comprising a polymerizable group, thereby producing a blend of randomly substituted mesogens.

106. (previously presented) The method of claim 105 wherein the blend of randomly substituted mesogens has a T_c of from about 20 °C to about 37 °C.

107. (currently amended) The method of claim 106 wherein the blend has a ΔT of about 10 °C or more and one member selected from the group consisting of X ~~comprises a~~

~~terminal functionality~~ and Y comprises a polymerizable group in about ~~60~~ 50 wt.% or more of said blend of randomly substituted mesogens.

108. (currently amended) The method of claim ~~106~~105 wherein the blend has a ΔT of about 10 °C or more and one member selected from the group consisting of X ~~comprises a terminal functionality~~ and Y comprises a polymerizable group in about 70 wt.% or more of said blend of randomly substituted mesogens.

109-125. (canceled)

126. (currently amended) A method for producing a blend comprising randomly substituted mesogens, said method comprising:

providing a first phenylene ring consisting essentially of a first functional group at a para-position to a first halogenated carboxylic group;

providing a second phenylene ring consisting essentially of a second functional group at a para- position to a second halogenated carboxylic group;

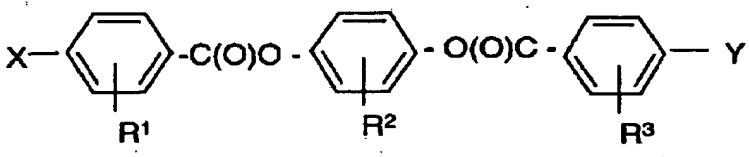
providing a third phenylene ring comprising R^2 and comprising a first functionality at a para- position to a second functionality; and

forming a mixture comprising said first phenylene rings, said second phenylene rings, and said third phenylene rings;

exposing said mixture to first conditions effective to react said first carboxylic group with said first functionality to produce a first ester bond, said first conditions being effective to react said second carboxylic group with said second functionality to produce a second ester bond, producing a reaction product comprising said first functional group at position para- to said first ester bond

and said second functional group at a position para- to said second ester bond, one or more of said first functional group and said second functional group being selected from the group consisting of H-$(CH_2)_n$-O- groups, Cl$(CH_2)_n$-O- groups, Br$(CH_2)_n$-O- groups, I$(CH_2)_n$-O-, and reactive derivatives thereof, wherein n is from about 2 to about 12 and CH_2 independently is selected from the group consisting of CH_2 which is unsubstituted and CH_2 which is substituted by an element selected from the group consisting of oxygen, sulfur, and an ester group; provided that at least 2 carbon atoms separate said oxygen or said ester group; and

treating said reaction product under second conditions effective to hydrolyze said first functional group and said second functional group, producing platform molecules ~~providing one or more platform molecules have~~having the following general structure:



wherein:

~~X comprises a terminal functionality and Y comprises a polymerizable group in about 50 wt% or more of said blend, and one or more members selected from the group consisting of X and Y comprises one or more spacer groups~~ X and Y comprise hydroxyl groups; and;

R^2 is a bulky organic group whereby, when both X and Y are reacted with polymerizable groups to produce polymerizable mesogens, R^2 provides sufficient steric hindrance to achieve a nematic state at room temperature while suppressing crystallinity of said polymerizable mesogens at room temperature; and,

R^1 and R^3 are selected from groups less bulky than R^2; and

independently ~~substituting at least~~ reacting ~~one~~a member selected from the group consisting of X and Y with a terminal group comprising a polymerizable group~~, thereby~~under third conditions effective to produce ~~producing~~ a blend of randomly substituted mesogens wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 50 wt% or more of said blend, said blend having a T_c of from about 20 °C to about 37 °C and a ΔT of about 10 °C or more.

127-141. (Canceled)

142. (New) The method of claim 105 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

143. (New) The method of claim 107 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

144. (New) The method of claim 108 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl

groups, and cinnamoyl groups.

145. (New) The method of claim 107 comprising producing said blend having a ΔT of about 20 °C or more.

146. (New) The method of claim 107 comprising producing said blend having a ΔT of about 30 °C or more.

147. (New) The method of claim 144 comprising producing said blend having a ΔT of about 20 °C or more.

148. (New) The method of claim 144 comprising producing said blend having a ΔT of about 30 °C or more.

149. (New) The method of claim 126 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 60 wt.% of said blend of randomly substituted mesogens.

150. (New) The method of claim 126 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 70 wt.% of said blend of randomly substituted mesogens.

151. (New) The method of claim 126 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

152. (New) The method of claim 149 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

153. (New) The method of claim 150 wherein said terminal groups comprise

polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

154. (New) The method of claim 126 comprising producing said blend having a ΔT of about 20 °C or more.

155. (New) The method of claim 126 comprising producing said blend having a ΔT of about 30 °C or more.

156. (New) The method of claim 153 comprising producing said blend having a ΔT of about 20 °C or more.

157. (New) The method of claim 153 comprising producing said blend having a ΔT of about 30 °C or more.

158. (New) The method of claim 126 wherein said second conditions comprise heating said reaction product in an aprotic solvent in the presence of water and potassium bromide to produce a reaction mixture comprising said platform molecules.

159. (New) The method of claim 126 wherein said third conditions comprise

recrystallizing said platform molecules from said reaction mixture; and,

reacting one or more of X and Y in recrystallized platform molecules with halogenated carboxyl group comprising a polymerizable group.

160. (New) The method of claim 158 wherein said third conditions comprise

recrystallizing said platform molecules from said reaction mixture; and,

reacting one or more of X and Y in recrystallized platform molecules with halogenated carboxyl group comprising a polymerizable group.

161. (New) A method for producing a blend comprising randomly substituted

mesogens, said method comprising:

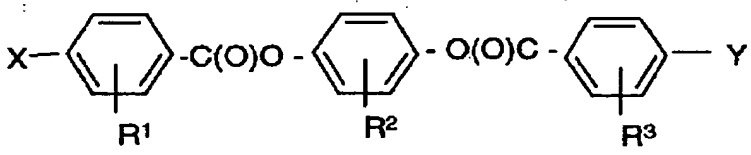
providing 4 alkoxy benzoyl chloride molecules comprising benzyl chloride groups at a position para- to alkyl ether groups;

providing R^2-hydroquinone molecules comprising first hydroxyl groups and second hydroxyl groups a para- positions;

forming a mixture comprising said 4-alkoxy benzoyl chloride molecules and said R^2 hydroquinone molecules; and,

exposing said mixture to first conditions effective to react a first benzoyl chloride group on a first 4-alkoxy benzoyl chloride molecule with said first hydroxyl group to produce a first ester bond, said first conditions being effective to react a second benzoyl chloride group on a second 4-alkoxy-benzoyl chloride molecule with said second hydroxyl group to produce a second ester bond, producing a reaction product comprising said first alkyl ether group at position para- to said first ester bond and said second alkyl ether group at a position para- to said second ester bond;

treating said bis terminal alkoxy groups under second conditions effective to cleave at least one of said first alkyl ether group and said second alkyl ether group to produce a reaction product comprising one or more platform molecules have the following general structure:



wherein one or more of X and Y comprise hydroxyl groups;

R^2 is a bulky organic group whereby, when both X and Y are reacted with polymerizable groups to produce polymerizable mesogens, R^2 provides sufficient steric hindrance to achieve a nematic state at room temperature while suppressing crystallinity of said polymerizable mesogens at room temperature; and,

R^1 and R^3 are selected from groups less bulky than R^2; and

independently reacting at least one member selected from the group consisting of X and Y with a group comprising a polymerizable group under third conditions effective to produce a blend of randomly substituted mesogens.

162. (New) The method of claim 161 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 50 wt% or more of said blend, said blend having a T_c of from about 20 °C to about 37 °C and a ΔT of about 10 °C or more.

163. (New) The method of claim 162 wherein the second conditions comprise a quantity of nucleophile and an amount of Lewis acid effective to cleave at least one of said first alkyl ether group and said second alkyl ether group.

164. (New) The method of claim 163 wherein said quantity of nuceleophile and said amount of Lewis acid also are effective to precipitate said platform molecules from said reaction product.

165. (New) The method of claim 163 wherein:

said nucleophile is thiol and said quantity of nucleophile is about 1 mole of thiol or

more per mole of alkyl ether;

said Lewis acid is aluminum chloride at a ratio of about 4:1 to said alkyl ether.

166. (New) The method of claim 164 wherein:

said nucleophile is thiol and said quantity of nucleophile is about 1 mole of thiol or more per mole of alkyl ether;

said Lewis acid is aluminum chloride at a ratio of about 4:1 to said alkyl ether.

167. (New) The method of claim 166 wherein said second conditions further comprise a molar excess of halogenated solvent in relation to the quantity of thiol, the molar excess being sufficiently high to maintain precipitated platform molecules in slurry form.

168. (New) The method of claim 167 wherein said molar excess is from about 3 to about 7 molar excess in relation to the quantity of thiol.

169. (New) The method of claim 168 wherein said molar excess is about 5 or more in relation to the quantity of thiol.

170. (New) The method of claim 169 wherein the halogenated solvent is dichloromethane.

171. (New) The method of claim 162 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 60 wt.% or more of said blend of randomly substituted mesogens.

172. (New) The method of claim 162 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 70 wt.% or more of said blend of randomly substituted mesogens.

173. (New) The method of claim 167 wherein one member selected from the

group consisting of X and Y comprises a polymerizable group in about 60 wt.% or more of said blend of randomly substituted mesogens.

174. (New) The method of claim 167 wherein one member selected from the group consisting of X and Y comprises a polymerizable group in about 70 wt.% or more of said blend of randomly substituted mesogens.

175. (New) The method of claim 162 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

176. (New) The method of claim 167 wherein said terminal groups comprise polymerizable groups selected from the group consisting of acryloyl groups, methacryloyl groups, and cinnamoyl groups.

177. (New) The method of claim 162 comprising producing said blend having a ΔT of about 20 °C or more.

178. (New) The method of claim 162 comprising producing said blend having a ΔT of about 30 °C or more.

179. (New) The method of claim 167 comprising producing said blend having a ΔT of about 20 °C or more.

180. (New) The method of claim 167 comprising producing said blend having a ΔT of about 30 °C or more.